InRoads – Freehand Profile Preferences

Overview
Profiles typically follow a horizontal roadway alignment and display the existing ground surface along the alignment. This is done for plans production or as a reference in preparation for creating a vertical roadway alignment, and the WSDOT profile preference is still recommended for that workflow.

The InRoads Create Profile tool can also be used in Multipoint Alignment mode to create freehand profiles (similar to the legacy CAiCE freehand cross section tool) by identifying two or more points anywhere on a surface. The Freehand_features and Freehand_w/o features preferences are recommended when using the Create Profile tool to create freehand profiles. These preferences and the associated workflow are described in this technote.

Workflow
There are two WSDOT preferences for creating freehand profiles. Freehand_features will annotate surface graphics and feature points in the profile for any crossing features in the selected surfaces. The Freehand_w/o feature preference draws only the surface graphics.

1. In InRoads, select the Evaluation > Profile > Create Profile… command.
2. Select Preferences. Determine if displaying crossing features is desired and select the appropriate preference from the Preferences dialog.

Note: This tool honors feature filters. Use filters to view only subterranean, roadway, 3D, etc. features.
3. Under the **General** tab, type a **Set Name** (starting a series with _01 will allow automatic incrementing) and select the desired **Exaggeration and Surfaces**.

**Note**: Vertical exaggeration also impacts the feature symbology, so default exaggeration is set to 1:1 for the **Freehand_features** preference.

4. Select the **Apply** button, and following the MicroStation prompts, identify two points to define the limits of the freehand profile, and then reset.
5. Complete the command by selecting a location to place the bottom left corner of the profile. The resulting freehand profile is annotated with color coded surfaces, the set name, and a legend documenting surface names, linestyles and vertical exaggeration.

For questions or comments on this tech note, contact your regional CAE Support Coordinator or the WSDOT CAE Help Desk at (360) 709-8013.